

ABSTRACT OF THE DISCLOSURE

A guide block assembly is provided for retaining fiber bore forming pins and guide pin bore forming pins in precise relation to each other during the molding of a ferrule used in a multi-fiber connection. The assembly may include a top portion and a bottom portion with corresponding fiber and guide pin bore grooves formed on a surface of the top and bottom portions. When the top and bottom portions are assembled, the corresponding fiber and guide pin bore grooves form fiber and guide pin bores, respectively. The assembly may also include another portion that form additional bores with either the top or the bottom portion.

A unitary block assembly is also provided for retaining fiber bore forming pins and guide pin bore forming pins in precise relation to each other. The unitary block assembly contains fewer parts and is therefore less expensive to manufacture. Methods of fabricating and aligning the guide block assembly are also disclosed.